COUNTY OF LOS ANGELES
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To enrich lives through effective and caring service.

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May 26, 2009

To: Each Supervisor

From: Tom Tindall
          Director

Subject: **AMENDMENT OF INFORMATION TECHNOLOGY SUPPORT SERVICES MASTER AGREEMENT (ITSSMA) WORK ORDER 06-1050**

This is to notify you of ISD's intent to amend ITSSMA Work Order 06-1050 with Unified Technical, Inc. to increase the amount by $269,200 for a maximum Work Order amount of $569,199 and to extend the Work Order term through June 30, 2010. In accordance with ITSSMA guidelines, Board notification is required for all projects that will exceed $300,000.

BACKGROUND

ISD's Midrange Computing Division (MCD) manages the virtual infrastructure to host virtual Windows servers running critical County applications in both the Downey Data Center and Local Recovery Center (LRC) in Santa Ana to support ISD's departmental strategic goal for server consolidation. Virtualization allows the County to run multiple virtual operating systems on the same physical host machine by sharing computing resources. This enables consolidation of hardware which significantly reduces the requirements for network, power, cooling, and space in both Data Centers. The subject Work Order provides a VMware Certified Professional to implement this virtual infrastructure environment by configuring and managing these virtual machines and hosts.

The rapid growth of virtual servers and the Disaster Recovery (DR) solution implementation for the virtual machines (VMs) in the County's Downey Data Center and LRC have created the need to extend this Work Order for the current VMware consultant to supplement our technical work force.

SCOPE OF WORK

Under the direction of an ISD Project Manager, the consultant working under this Work Order on a time and materials basis performs the following specific services:

- Plans and designs the virtual infrastructure architecture and performs capacity planning.
- Provides consulting to ISD teams and customers to determine VM system design and specifications to yield best performance.
- Plans and implements Disaster Recovery architecture and procedures for VM failover from the Downey Data Center to the Santa Ana LRC. Performs periodic testing of the failover capability.
- Installs, configures, and maintains VMware physical ESX hosts and VirtualCenter according to VMware's Best Practices.
- Administers, troubleshoots, and monitors VMs and ESX hosts including tuning the system configurations to improve performance and managing resource allocations.
- Collaborates with various ISD teams to configure networking, Storage Area Network (SAN), and security for the virtual infrastructure.
- Installs, configures, and supports VMware Site Recovery Manager (SRM) to automate the Disaster Recovery failover process.
- Migrates physical Windows servers to Virtual Servers using P2V converter or other tools.
- Installs, configures, and manages VMware Lab Manager.
- Develops and documents operating and maintenance procedures for the virtual infrastructure environment and provides knowledge transfer to MCD staff.

JUSTIFICATION

Virtualization and Disaster Recovery is a highly specialized technical area requiring extensive experience. This expertise cannot be easily obtained in a short period of time by training the current staff. Server consolidation and virtualization being the departmental initiative and strategic goal, implementation of virtualization has caused a rapid expansion of the virtual infrastructure. Staff with extensive knowledge and experience in VMware software, networking, and SAN technologies is needed to manage this rapid growth of the infrastructure to accommodate new business and critical projects such as the DCFS IT migration, eCAPS/eHR implementations, Citrix projects, and the Disaster Recovery implementation.

As the virtual infrastructure grows to an enterprise-class environment to ultimately virtualize most of the 900 Windows servers hosted by MCD, expertise that this consultant possesses is critically needed to carry out the architect role for designing, planning, and implementing the appropriate enterprise architecture of the virtual environment in order to provide a reliable and highly redundant infrastructure for MCD customers.

The contractor's workload cannot be allocated to existing staff since the staff is already working at full capacity providing daily operational support and management of the virtual infrastructure. Training other available ISD staff will take approximately 3 to 4 years to bring a journeyman system administrator to the necessary level of expertise.

This Work Order needs to be extended to maintain continuity of service until a permanent IT Specialist item is approved and filled. Rebidding this Work Order will introduce significant delay and require additional startup time to familiarize the new contractor with our complex environment. There are currently 3 permanent staff and 2 contractors supporting this enterprise virtual infrastructure.

The skill set provided by this consultant is critical to the ongoing virtual infrastructure support and management by MCD to support the server consolidation effort. Since County staff is not available to provide these essential functions, an IT Specialist position was requested for FY09-10 for recruitment of permanent staff. However, the request was denied, making retention of this contractor vital to the ongoing support of the virtual infrastructure environment. MCD will request this item again for FY10-11. If our request is granted, permanent staff will be hired as soon as the position becomes available and an exam can be opened. Upon hiring permanent staff, this Work Order will terminate 3 months from the hiring date to allow sufficient time to familiarize the new staff with our complex infrastructure environment.

FISCAL IMPACT

The consultant's hourly rate for the Work Order extension will remain the same. Funding is allocated in the ISD Services and Supplies budget for fiscal year 2009-2010. Costs are recovered through chargeback for Windows server hosting and administration services to County departments. There is no impact on net County costs.

NOTIFICATION TIMELINE

Consistent with ITSSMA policies and procedures, we are informing your Board of our intention to extend the term of this Work Order and increase funds. In two weeks time, we will proceed with the extension.

Each Supervisor
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If there are any questions or comments, your staff may contact me or Dave Chittenden, Acting General Manager, Information Technology Services, at (562) 940 -2901.

DC:jr

c: Chief Executive Officer
        Executive Office, Board of Supervisors
        County Counsel
        Joe Sandoval

NOTED AND APPROVED:

Richard Sanchez,
Acting Chief Information Officer